

ABSTRACT OF THE DISCLOSURE

An atomic layer deposition method for forming a microelectronic layer employs a reactor chamber pressure of greater than about 500 mtorr and more preferably from about 20 to 5 about 50 torr. By employing a reactor chamber pressure within the foregoing range, the microelectronic layer is formed with an enhanced deposition rate while employing the atomic layer deposition method, due to a gas phase chemical vapor deposition component to the atomic layer deposition method.